

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

IN RE FOREIGN EXCHANGE BENCHMARK RATES ANTITRUST LITIGATION

No. 1:13-cv-07789 (LGS)

DECLARATION OF MICHAEL MELVIN, Ph.D.

September 14, 2022

Contains Highly Confidential Information

I. Introduction

1. I have been asked by Cahill Gordon & Reindel LLP (“Cahill”), counsel for Defendants Credit Suisse Group AG, Credit Suisse AG, and Credit Suisse Securities (USA) LLC (together, “Credit Suisse”), to address certain contentions raised in Plaintiffs’ *Daubert* motions to exclude my testimony in this matter.¹ In particular, I have been asked to address Plaintiffs’ contention that I “cherry-pick[ed]” days for my analyses of spread stability.² As I detail in this declaration, the Plaintiffs’ contention is plainly wrong and further analysis of spreads on dates selected by Plaintiffs’ experts demonstrate that the results I originally presented capture the typical spread volatility present during the Class Period.
2. The analyses presented in this declaration are based upon my experience and the data, documents, and analyses in my report dated March 12, 2020.³ For brevity I do not include in this declaration any materials or information contained therein. For this matter, I am being compensated at my standard billing rate of \$1,000 per hour. My compensation does not depend in any way on my opinions. I reserve the right to revise or supplement my opinions in light of my ongoing review of the materials I have considered, as well as additional materials, including data, documents, and deposition or other testimony that may subsequently come to light, or if I am asked to perform further research or analysis.

¹ Memorandum of Law in Support of Plaintiffs’ *Daubert* Motion to Exclude Credit Suisse’s Proposed Expert Opinions, *In Re Foreign Exchange Benchmark Antitrust Litigation*, August 26, 2022 (“Plaintiffs’ *Daubert* Motion”).

² Plaintiffs’ *Daubert* Motion, p. 10.

³ Expert Report of Michael Melvin and Backup, Ph.D., March 12, 2020 (“March 2020 Merits Report”).

II. Response to “Cherry-Picking” Allegation

3. As an initial matter, the Plaintiffs’ contention that the dates I selected to show intraday spread volatility were cherry-picked ignores my stated selection methodology. The four dates I used in my report were based on the dates of the four spread information sharing discussions excerpted by Plaintiffs’ expert Mr. Poynder in his bank chat report.⁴ I am not aware of how Mr. Poynder selected chat excerpts from these four dates for discussion in his report, but my use of these dates was entirely based on my assignment to respond to Mr. Poynder’s opinions. To the extent these dates were cherry-picked, the decision to select these dates was made by Mr. Poynder.
4. Second, Plaintiffs’ focus solely on one of these four dates, May 15, 2011 (four days after the Fukushima nuclear disaster) to suggest that my entire analysis is “cherry-pick[ed]” as, in their view, this date overstates volatility in Japanese Yen. However, Plaintiffs ignore the analysis of the other three dates, and ignore the fact that I provided an analysis of five currency pairs on each date, only two of which include the Japanese Yen. Instead, Plaintiffs focus only on one of the four dates, and cite to a Guardian article that discusses the turbulence in the Japanese Yen/U.S. Dollar currency pair during that period of time. As such, even if March 15, 2011 did exhibit increased volatility in Japanese Yen (or even other currency pairs), I have analyzed the other three dates and other currency pairs, which also show similar volatility, which renders any suggestion of “cherry-picking” misleading and incorrect.
5. In addition, the Class Period spans many years, which include periods of turbulence in financial markets such as the global financial crisis, the European sovereign debt crisis, the

⁴ Merits Expert Report of Robin Poynder – Bank Chats, January 23, 2020, ¶¶69-73.

Fukushima disaster, and many others. As I show in **Exhibit 4A-E** in my March 12, 2020 Merits Report, the Class Period had moments of volatile spreads and others of relatively more stable spreads. These changes in spread volatility were at times specific to particular currency pairs and at other times volatility changed for most currency pairs. In addition, these changes were sometimes gradual over days or months, and sometimes sudden over just minutes or hours. The presence of shifting levels of volatility is a fact that cannot be disputed based on the data and, as I show below, the dates I use in my report to exemplify this fact are clearly not exceptional.

III. Supplemental Spread Analysis

6. Plaintiffs' contention that the dates used in my spread volatility analysis are cherry-picked and somehow not representative of spreads during the Class Period is also refuted by examining further dates selected by Plaintiffs' experts. **Declaration Exhibits 1A to 5J** show the same intraday implied spread analysis for the five currency pairs I presented in my report,⁵ but for ten new dates. These ten new dates were drawn from the dates Dr. Singer's relies upon, using two approaches:

- a. The first set of five dates are drawn from footnote 17 of Dr. Singer's merits report⁶ which excerpts a series of chats on these days which Dr. Singer purports to support his conclusion of spread stability.⁷
- b. The second set of five dates are drawn from the chat appendix to Dr. Singer's rebuttal report⁸ which includes approximately 2,400 chat excerpts Dr. Singer purports to include spread discussion. I filtered this dataset for the five currency pairs I examined in my report, relying on Dr. Singer's identification of the currency pairs featured in the discussions. I find that there are two dates where all five currency pairs feature in

⁵ The currency pairs are: USD/JPY, EUR/CHF, EUR/USD, USD/CHF, and EUR/JPY. See, March 2020 Merits Report, Exhibits 2, 3, and Appendix Exhibits 1 and 2.

⁶ Merits Report of Hal J. Singer and Backup, Ph.D., January 23, 2020.

⁷ The dates are December 15, 2010; October 21, 2011; April 19, 2012; December 4, 2012; and January 30, 2013.

⁸ Rebuttal Report of Hal J. Singer and Backup, Ph.D., July 31, 2022.

excerpts and another three dates where four of the five currency pairs feature for a total of five additional dates, which I include in my analysis.

7. The analyses for these ten additional dates show that the intraday spread volatility plots for the four dates included in my report are not remarkable. For instance, Plaintiffs contend that showing intraday spread volatility on March 15, 2011, one of the four dates I examined in my March 2020 Merits Report, was misleading because of the contemporaneous Fukushima nuclear disaster. However, the intraday EBS implied spread volatility on that day for USD/JPY,⁹ which Plaintiffs suggest was misleading due to the disaster, is similar to the observed EBS implied spread volatility in USD/JPY for the ten additional dates I have analyzed in connection with this declaration (**Declaration Exhibits 3A-J**). For instance, the intraday spreads on May 20 and 21, 2010 (**Declaration Exhibits 3B and C**) and October 21, 2011 (**Declaration Exhibit 3G**) varied by largely the same amount as the intraday spreads on March 15, 2011. These analyses, which span most of the Class Period, show that the level of spreads changes over time and that the intraday variation in spreads can be substantial.
8. The spread volatility on the four dates I analyze in my March 2020 Merits Report can also be compared with the intraday spread volatility during the surrounding time period to evaluate whether the spread volatility on an individual day was unusual. This is inherently a more meaningful evaluation of the relative volatility of intraday spreads for any given date as the level of spreads and spread volatility shifted throughout the Class Period such that spread volatility on March 15, 2011 should not reasonably be compared to volatility in late 2012 or early 2009, for example.¹⁰ In the **Declaration Exhibits 6A to 9E**, for each

⁹ See March 2020 Merits Report, Exhibit 3A.

¹⁰ See March 2020 Merits Report, Exhibits 4A-E.

of the four dates and each of the currency pairs analyzed in my March 2020 Merits Report, I plot the daily range of spread levels for the three months prior to, and the three months following, each of the four dates. The black line shows the daily median spread level while the blue section shows a high-low daily spread range based on the 10th and 90th percentile spread value on each day, which is a proxy for the daily volatility of the spreads. The blue, green, and red bars respectively show the average 10th percentile, 50th percentile (i.e., median), and 90th percentile spread level for the whole period plotted.

9. The analyses show that the dates analyzed in my March 2020 Merits Report are not outliers in terms of spread volatility relative to the surrounding period as the volatility for each of these four days typically falls within the long-term volatility range. It is clear from these analyses that the dates I evaluated (based on Mr. Poynder's chat excerpt selection) do not show unusual or misleading levels of volatility. Finally, the analyses show sharp changes in volatility ranges from one day to the next, reflecting that spread conditions change meaningfully over short periods of time despite spread volatility on any given day falling within the longer-term ranges of volatility. In other words, spreads are clearly not stable despite falling within longer-term ranges of volatility.
10. In summary, the Plaintiffs' contention that I cherry-picked days to analyze spread volatility is unfounded and is incorrect to the extent that it suggests that the dates I selected are particularly volatile days or misleading with respect to the volatility of implied spreads across the Class Period. The analyses included in this declaration show that these four dates were not in fact outliers, but rather typical reflections of the intraday spread volatility across the currency pairs during the Class Period. Finally, while the spread levels and volatility that I show are not unusual for the Class Period, this does not imply that spreads

were stable. In fact, these analyses provide further evidence for the indisputable fact that spreads are not stable.

A handwritten signature in black ink, appearing to read 'MM', is written over a horizontal line.

Michael Melvin, PhD
September 14, 2022